



Dr. Anna Sher

University of Denver
Professor, Biological Sciences
Faculty Director, DU-MERISTEM



Anna A. Sher, Ph.D. is a full professor in the Department of Biological Sciences at the University of Denver, where she has been faculty since 2003. From 2003–2010 she held this position jointly as Director of Conservation and Research at Denver Botanic Gardens. Dr. Sher is also currently the Faculty Director of the DU MERISTEM, an NSF-funded program to increase representation and advancement of women and other underrepresented groups among STEM faculty. Dr. Sher received her PhD from the University of New Mexico, where she began her research on *Tamarix* ecology in collaboration with USFW scientists. As a postdoctoral researcher, Dr. Sher was awarded a Fulbright postdoctoral research fellowship to conduct research on native *Tamarix* and plant interactions in Israel at Ben Gurion University's Mitrani Department of Desert Ecology, and she also studied the ecology of an invasive riparian grass at the University of California, Davis. Dr. Sher's research has primarily focused on restoration ecology and invasive plant species, but she has also published works on interactions between plants and soil chemistry, mycorrhizae, insect diversity and trophic cascades, ethnobotany, phenology, climate change, and rare species conservation. She is author of the best-selling textbook *An Introduction to Conservation Biology* (3e, Oxford University Press), as well as the lead author of *Ecology: Concepts and Applications* (9e, McGraw Hill Education). She is most well-known for her work on the ecology of invasive *Tamarix* trees, and she is the lead editor of the only book devoted to the subject (Sher and Quigley, 2013, *Tamarix: A Case Study in Ecological Change*, Oxford University Press). She served on the board of the Tamarisk Coalition (now RiversEdge West) 2004–2010, including as its chair 2006–2010. The Sher Lab's current research explores the response of riparian plant communities to restoration using the lens of functional trait ecology, including human traits. Her group is the first to use manager traits and project organization to predict restoration outcomes, work funded by an NSF CNH grant, and her most recent PhD students are using statistical modeling, remote sensing and artificial intelligence to gain new insights into this system.

<https://du.digication.com/asher-1/home>



What's Data Got To Do With It? Connecting the Dots Between Research and Practical Applications

Dr. Anna Sher

University of Denver

Professor, Biological Sciences

Faculty Director, DU-MERISTEM

Restoration of riparian ecosystems is a complex endeavor that has benefitted from information and know-how gained over time by both practitioners and researchers. Unfortunately, in many areas of North America and the rest of the world there is little communication between those studying restoration and those doing the work on the ground, to the detriment of both endeavors. However, our research and experiences suggest that in the American Southwest, we have unusually high and effective exchange of riparian restoration information and ideas, undoubtedly facilitated by organizations such as RiversEdge West and this biennial conference. This is evidenced by the results of surveys of land managers and restoration scientists, and by many successful projects across this region. Our analyses have also revealed the importance of both multi-stakeholder collaboration and diverse sources of information for achieving restoration goals. It is critical for scientists to listen and respond to the questions and needs of practitioners, while honing our scientific communication skills. In this presentation I will share some of the recent trends in riparian restoration research and invite the audience opportunities to contribute their own priorities and concerns in this interactive presentation.